

Penrith Health & Education Precinct

Strategic Vision 2011



Health



Education



Research



Business

“To become one of Australia’s premier destinations for health, education, medical research and related industry over the next 10 years”

Task force participation:



Foreword by Task Force Chairman

“The NSW Government is participating in a Taskforce with the Alliance to develop a strategic vision for the Precinct.”

Metropolitan Plan for Sydney 2036, p 67

HEALTH, LIFE SCIENCE AND COMMUNITY SERVICES	An industry attraction strategy for Life Science companies including skills supply, infrastructure, research and regulatory requirements will be developed and implemented. This will include the development of the Penrith Health and Education Precinct around Nepean Hospital to attract health professionals, health businesses and research facilities.	Over the next 12 months	Paul Brennan Chairman Penrith Business Alliance
	Establish a Penrith Health and Well Being innovation Network of local firms and entrepreneurs in collaborate on growing opportunities in Health and Wellbeing.	Over the next 12 months	Paul Brennan Chairman Penrith Business Alliance

NSW Government Response to Western Sydney Job Summit, 2010

Introduction

In May 2010 the Penrith Business Alliance (PBA) was nominated by the NSW Government as the lead agency to report back on the development of a 'Penrith Health and Education Precinct'. The vision will attract Life Science companies to Penrith, and demonstrate the why Penrith is an appropriate place to locate.

Following support provided by the NSW Department of Premier & Cabinet, the PBA formed an expert advisory task force of leaders from major health, education institutions and businesses within the precinct, along with a range of interested community and government agencies.

Together this task force has prepared this Vision to establish the Penrith Health and Education Precinct, with the objective of becoming one of Australia's premier destinations for health, education, medical research and related industry over the next 10 years. The vision was also steered by 'Towards a Penrith Health and Wellbeing Economic Strategy', commissioned by the PBA in 2010.

As shown on page 6, the precinct is focused around the rapidly growing public and private Nepean Hospitals, the Hospital Specialist Clinic, the Kingswood campus of the TAFE NSW - Western Sydney Institute, the University of Western Sydney and the University of Sydneys (Sydney Medical School Nepean).

The vision aims to create local jobs, grow the skills base of the region and to attract new investment to Penrith through delivery of projects focused around the following four themes:

- World leading health services
- Education and training, related to health & wellbeing
- Research, in medicine and preventative health
- Business opportunities, related to health, medicine & wellbeing

The task force will develop a World leading precinct that is globally competitive, but locally embedded in the economic and social fabric of Western Sydney. In support of the task force's intentions, the Precinct was recently (Dec 2010) recognised as a Potential Specialised Centre in the Metropolitan Plan for Sydney 2036. The precinct will also assist in delivering employment outcomes for Penrith's future role as a Regional City for North Western Sydney.

All effort has been made by the task force to ensure this work is a shared vision.

Brief history of the precinct

The first seeds of the precinct can be traced back to 1846 when the Penrith and District Dispensary and Benevolent Society was formed by Penrith residents wishing to establish a local Hospital. Soon after, the Society expended 500 pounds to build a Hospital with funds matched by the Government. Another local resident donated an acre of land in Cox Ave.

This historical partnership was the precursor to the future establishment of the Nepean District Hospital in 1956. While the precinct's major educational facilities like UWS and TAFE NSW - Nepean College, Kingswood Campus came much later (1989 and 1987 respectively), they were nevertheless the result of long term commitment by Government to plan for the development of the region. It is not surprising that locally, these facilities are regularly referred to as 'our Hospital' or 'our University and TAFE'.

In short, the development of the precinct has been the result of long term Government planning, and community ownership over Penrith's future.

"It is this tradition through an effective working role with the Government that this vision will be implemented"

Future of the precinct

The precinct has grown rapidly over the last decade in terms of jobs, student enrolments and residents living in the precinct.

We now aim to continue this growth through establishing new magnet infrastructure to attract further investment and higher order employment to Penrith. We also aim to position the precinct as an important hub for health professionals, research and education services for both a growing metropolitan population, and a wider Central NSW region.

The Vision will provide guidance for the planning of necessary infrastructure, including transport services that will support the opportunity the precinct offers.

As shown on page 9, between 12,000 and 13,000 new jobs will be created in the precinct by 2036. Further, we estimate that one-third of all new jobs in Penrith by 2036 will be in health and wellbeing related fields, either located within the precinct, or related to the health industry in some way.

Implementation

This Strategic Vision is the first step in fostering an environment of collaboration and cooperation between the key stakeholders. The following

steps will move the project forward:

- Submission of the Vision to Government in early 2011 seeking approval and support.
- Seeking endorsement from all relevant stakeholders through negotiation of an MOU, including establishing the Penrith Health and Education Precinct development committee to lead the project and mobilise resources.

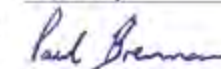
Some of the tangible projects that have already been identified by the task force for implementation include:

- Growing Penrith's Medical Research capabilities & infrastructure
- Establishing a National Centre for E-Health
- Establishing the Penrith health and wellbeing innovation network for local firms and entrepreneurs to collaborate on growing opportunities in health and wellbeing.
- Development of a future 120 ha. health industry business park at Werriington
- Full implementation of 'Towards a Penrith Health and Wellbeing Economic Strategy'.

I would like to encourage the reader to become involved in the active implementation of the Vision. Ultimately we believe the Vision will serve as a guide to encourage planning and investment from both the public and private sectors in the Precinct.

Finally I would like to acknowledge and thank all Task Force members who contributed to the preparation of this Vision. We hope you enjoy the Vision and welcome any feedback or comments you may have.

Yours sincerely,



PAUL BRENNAN
Chairman, Penrith Business Alliance & Taskforce to establish the Penrith Health & Education Precinct



“Penrith residents come together to raise funds to establish a local Hospital, the Government later matches this commitment, and the first Penrith hospital opens in 1860 on Cox Avenue”

History



1850 Penrith Hospital



1895 Nepean Cottage Hospital



1956 Nursing staff at Hospital opening



1960 Frogmore House (future UWS Chancellor)

Timeline

- 1846 The Penrith District Dispensary and Benevolent Society form ecto establish a local Hospital
- 1860 The first 6 bed hospital in Penrith opens on Cox Avenue
- 1871 First hospital closes due to economic depression - local patients referred to Parramatta
- 1890 Temporary hospital opens on High Street and the first matron is appointed - an experienced nurse but with no formal training
- 1891 The second matron appointed - Miss Emma Hawk who was a trained nurse
- 1895 Nepean Cottage Hospital opens at Lemongrove - it has 3 Wards
- 1904 Miss Hawk soon resigns due to "overliness of living out of town in the built"
- 1923 First Operating Theatre opened at Nepean Cottage Hospital
- 1936 Hospital changes name to Nepean District Hospital
- 1938 The Nepean District Hospital commences as a Training School for General Nurses
- 1956 Planning commences for the next Hospital. Current Hospital site purchased for 500 pounds
- 1968 The Nepean District Hospital opens on the present site
- 1968 The Sydney Region Outline Plan first two phases a new University, a College of Advanced Education and a Teachers Training College (CET) opens on the railway line at Werrington.
- 1973 Teachers College of Advanced Education (CAE) opens on second Avenue Kingswood
- 1981 Hospital changes name to Nepean Hospital
- 1987 TAFE NSW - Western Sydney Institute, Nepean College, Kingswood Campus opens at Kingswood due to training demands of the region
- 1989 UWS Nepean created at Kingswood when the Teachers CAE is given University status under the University of Western Sydney Act of 1988
- 1990 Nepean Hospital becomes a teaching Hospital of the University of Sydney

This document has been organised so the reader can view relevant chapters in reference to a master plan of the existing and envisaged components of the Penrith Health and Education Precinct. Individual chapters describe the Vision in parts that when combined define the precinct.

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1968 Sydney Regional Outline Plan announced



1986 TAFE NSW - Western Sydney Institute, Nepean College, Kingswood Campus under construction



1990s Additions and redevelopments to hospital



Structure Plan of the Penrith Health and Education Precinct



POTENTIAL SPECIALISED CENTRE

Future link to M4 motorway

Case Studies of Health, Education and Research Precincts



Brisbane, QLD

Princess Alexandra Hospital (PAH) is a well established health campus, being one of Australia's largest tertiary referral hospitals. It has a national reputation for medical research and clinical work in areas such as cardiology and prostate cancer. The hospital is centrally located in proximity to major knowledge assets in Brisbane, including: the newly constructed Pharmacy Australia Centre of Excellence (PACE), a Translational Research Institute and the Diamantina Institute that features joint academic appointments with the adjacent University of Queensland. PAH is also adjacent to the CSIRO Eco-science precinct.

This precinct has easy access to the Brisbane CBD, the University of Queensland and the Brisbane Mater Hospital. The construction of a bridge for walkers, cyclists and buses has linked the University of Queensland to the PAH. The importance of the precinct is highlighted in the Brisbane City Draft River City Blueprint that indicates: One of the aims is to create an inspiring working environment that will be an important catalyst for urban renewal, particularly for knowledge workers in mid-careers.

Government investment in new health and research infrastructure is resulting in a dramatic increase in demand for knowledge workers including scientists, researchers, clinicians and highly trained allied health workers.

Building relationships, real partnerships and social networks has been central to the success of all major projects in the precinct. A good example is the Translational Research Institute that is a collaborative project between the state and federal governments, the PAH and Mater Hospitals, Queensland Health and the University of Queensland.

Economic benefits

- 2,000 medical related researchers over the next 5 years
- 60,000 sqm of new commercial floor space for specialty health businesses (under construction)
- \$400 million private sector investment in new research facilities



Macquarie Park, Sydney

Macquarie Park is recognised as Australia's most successful high technology business park. It is located adjacent to Macquarie University and Australia's first and only private university hospital – the Macquarie University Hospital. It also features significant university based research facilities with strong industry links. The concept for Macquarie Park was first inspired in the late 1960s by the Stanford – Silicon Valley relationship in Palo Alto, California.

The Park was nominated as a Specialised Centre in the 2005 Sydney Metropolitan Strategy with an employment target of 58,000 workers by 2036. Currently the Park employs around 32,308 workers in leading technology companies such as BD, Terumo, Optus, Siemens, CSIRO and others. Macquarie University is also likely to have 40,000 students by 2031 (currently 20,000).

Prior 2009, Macquarie Park was car dependent until the Epping to Chatswood railway was completed – adding three stations to the 340ha combined technology, hospital and education campus. The Park is also served by the M2 Motorway.

The Park also features regional shopping centre of nearly 100,000 sqm, and other sporting and cultural facilities that make it an attractive place to work. The success of the nexus between Macquarie Park and the University offers a good case study for UWS and the proposed Werrington Health Industry Park.

Economic benefits

- 32,308 high order jobs (2006)
- 4th largest concentration of jobs in Sydney behind Sydney, North Sydney and Parramatta CBDs
- Research orientated enterprises linked to education and health facilities



Boston, Massachusetts

A world leading Biotechnology cluster evolved in Boston over the last 30 years based around major research, education and health assets such as: the Massachusetts Institute of Technology (MIT), Harvard University, Boston University, Massachusetts General Hospital and other Boston based hospitals.

Together, this cluster has spurred the creation of a range of biotechnology businesses, from small start-ups based in the MIT science park, to large pharmaceutical and venture capital firms. Although there are now a diverse range of organisations that drive innovation, they didn't all come at once.

During the 1990s many venture capital firms grew around the science and medical facilities, followed by pharmaceutical companies in the 2000s.

Regular publication of research, the organisation of workshops and conferences, and wide circulation and debate and ideas, promotes a culture of openness and innovation, resulting in close links between the public science research community and private science commercial interests.

The Boston Biotechnology cluster is also supported by a number of intermediaries that have been established to build formal innovation networks between research and industry. The most significant is the Massachusetts Biotechnology Council (MBC). The MBC is a state wide industry association primarily concerned with building collaboration between individuals and member companies, concentrating on common purchasing, promotion, educational placement and career development.

Economic benefits

- 20 new biotechnology start ups per year
- Critical science, technology and medicines that benefit people worldwide
- The largest concentration of Biotechnology workers in the World (30,000 in 2009)

“The establishment of the Penrith Health and Education precinct as a Potential Specialised Centre would build on employment and education opportunities around Penrith including Nepean Hospital at Kingswood and the University of Western Sydney and TAFE NSW campuses at Kingswood and Werrington”

Regional and Employment Context

“Specialised centres are areas containing major airports, ports, hospitals, universities, research and/or business activities that perform vital economic and employment roles across the metropolitan area”

Metropolitan Plan for Sydney 2036, p 67



Modern Planning - 160 years in the making

The planning for Hospital services in the Precinct can be traced back to 1846 when the Penrith District Benevolent Society formed to establish a local Hospital. This led to a series of interim Hospitals in Penrith until the current Nepean Hospital first opened in 1956 (originally as a District Hospital).

In 1968 the Sydney Region Outline Plan (SROP) provided a plan for Western Sydney's growth to the year 2000 - when Sydney's population was expected to reach 5 million. The SROP based this planned growth around the rail lines. The 'Western Sector' was allocated a major tertiary education complex at Werrington; and a College of Advanced Education on proposed sites adjoining the railway line at Werrington.

By the late 1980s these facilities were both established and were known as UWS Nepean and the Werrington College of TAFE. In 1990 the Sydney Medical School Nepean was added to this mix of education facilities.

In 2010 these educational facilities combined have 15,889 student enrolments, and the Hospital precinct provides more than 3,000 local jobs in the health and education sectors alone.

Sydney Metropolitan Strategy: 2005

The Sydney Metropolitan Strategy (2005) designated Penrith as a Regional City featuring 'a higher order centre providing the full range business, public and community services'. Penrith is one of three Regional Cities in Metropolitan Sydney. Penrith Regional City catchment extends from the Nepean River in the West to Ropes Creek in the East, and is centered upon the western railway. This corridor also embraces the Penrith CBD, Penrith Panthers, the North Penrith Defence lands, Nepean Hospital, the TAFE NSW - Western Sydney Institute, Nepean College and the Penrith Campuses of UWS.

The health sector will continue to play a central role in the growth of Penrith. In fact employment growth in the precinct has significantly outpaced that of Penrith CBD over the last decade.

The Strategic Vision for the Penrith Health and Education Precinct will guide and support the delivery of objectives outlined in the Sydney Metropolitan Strategy. The Vision also, for the first time, will exploit the opportunities that the collocation of major health and education institutions offers the region in terms of employment, research, health care and education.

Metropolitan Plan for Sydney 2036 - A potential Specialised Centre

In 2010 the NSW Department of Planning listed the Precinct as a Potential Specialised Centre in the Metropolitan Plan for Sydney 2036. This announcement will assist the Precinct in gaining the recognition it requires to further grow a critical mass of employment generating health, education and research facilities over the coming decades.

Penrith Health and Education Precinct is situated at the crossroads of three major growth areas: 1) the established Sydney Western Corridor including Blacktown, Penrith and the Blue Mountains, 2) the emerging outer west ring running around Penrith and connecting the North West Growth Centre, Hawkesbury and the South West Growth Centre, and 3) the rural based Central West region of NSW, which has strong and growing links to Nepean Hospital.

In 2006 the population of this catchment was 826,000 people. By 2036, the NSW Department of Planning conservatively forecasts this catchment will grow to 1,330,000, an increase of 500,000 people. By 2050 it is estimated that this population catchment could pass 4 million people. To accommodate this growth, substantial investment will be required in the health & education infrastructure within the precinct.

The evolution of the Precinct bears some parallels with the Westmead health precinct, which is emerging as one of the most substantial medical research and health precincts in the Southern Hemisphere. The Westmead specialised centre contains four hospitals and a range of medical research facilities. Close links with the community will drive new research agendas in a diverse range of areas including pediatrics, cancer, active health and E-Health.

Our Vision identifies that major government, health and education institutions are committed to working together to expand opportunities to meet demand, both to meet local needs but also to increase opportunities for international students & investment.

Links to future growth

The Penrith Health and Education Precinct is located at the midpoint between NSW's two largest growth Centres - North West Growth Centre (NWGC) and the South West Growth Centre (SWGCC). Combined, these new centres will accommodate more than 400,000 new people when completed. The Precinct could be easily accessed from these centres via the Northern Road and the a potential north-south arterial road (subject to investigation), including by public transport.

These two arterials could form the much discussed circumferential roads now required to complement the increasingly congested transport radials focussed

around Sydney CBD. If this infrastructure is planned for and pursued, the precinct will more effectively develop as a major service hub for Metropolitan Sydney and large parts of central NSW.

Benefits of the precinct to Western Sydney

Successful development of the Precinct, as outlined in this document will bring major benefits to Western Sydney, including:

- Improvements in health outcomes, better quality health care and reduced waiting times.
- Creation of an additional 12,000 to 13,000 new jobs by 2036 in health, education, knowledge-intensive industries and local services.
- New job opportunities in a diverse range of areas: medical researchers, scientists, clinicians, doctors, nurses and allied health staff.
- A critical mass of activities in health, education, and associated health related business.
- Catalyst to grow new investment opportunities in Penrith centre including health insurance, medical software and wellbeing firms.
- Improved connectivity between the precinct and Penrith CBD through provision of a shuttle bus.
- Upgraded transport infrastructure including Kingswood Station and a potential new station between Kingswood and Werrington.
- Establishing a health and medical research and knowledge hub in one of Australia's most rapidly growing regions.
- Attraction of new talented researchers, educators, clinicians and other health specialists to Penrith as an attractive living environment.
- Adding to Sydney's global reputation as a centre for health and medical research in key areas.
- Increasing opportunities for urban renewal with a capacity to accommodate 5,000 additional residents around public transport.
- Creating a diverse range of living environments with quality housing, shopping and entertainment.
- A world class 120 ha. Health Industry Business Park at North Werrington with close health and university links and an environment that attracts biomedical and health care firms.
- Attract the knowledge workers which are now concentrated in the eastern half of Sydney.

Penrith Health and

An aerial photograph showing a large, multi-story hospital complex (Penrith Health Campus) situated in a suburban residential area. The hospital buildings are light-colored with multiple wings and a central tower. Surrounding the hospital are numerous houses with red-tiled roofs, green lawns, and trees. A major road with multiple lanes and a roundabout is visible in the foreground. The background shows a vast, flat landscape under a clear sky.

PENRITH HEALTH CAMPUS

Education Precinct

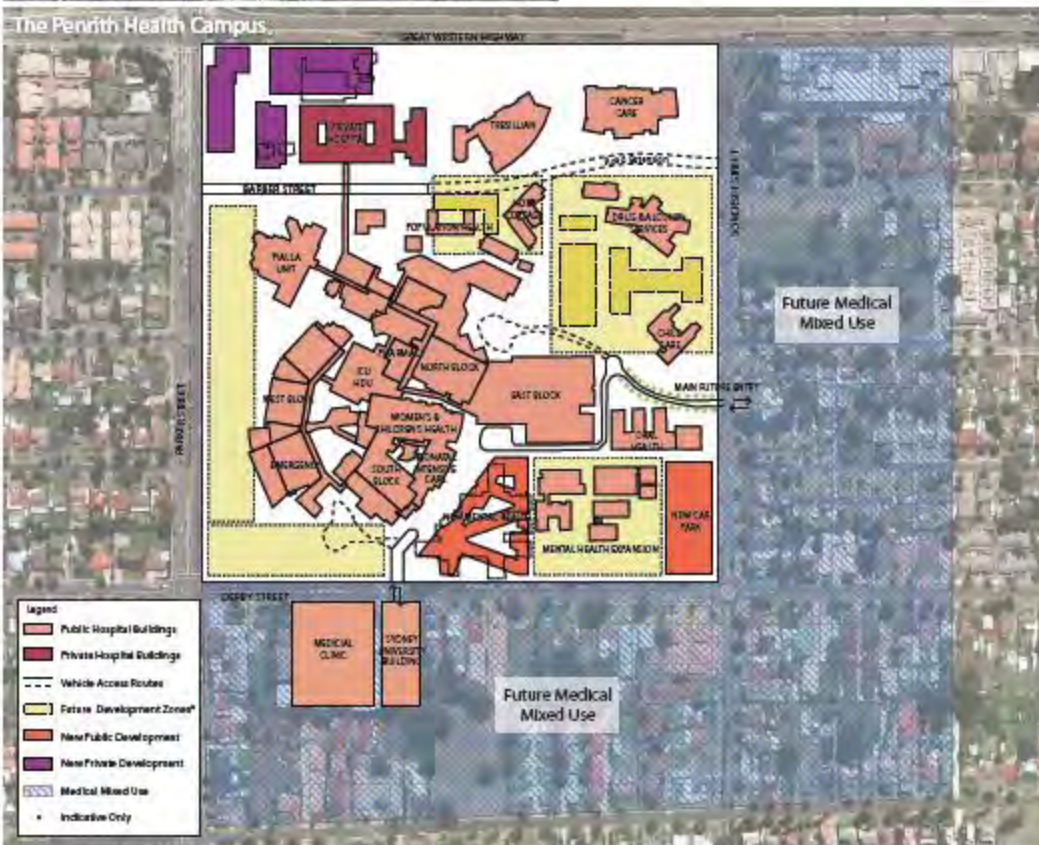




Health Services

A full range of acute and sub acute Hospital services including research and teaching facilities for a population catchment that will double over the next 20 years.

The Penrith Health Campus



Existing services

- HS1. Nepean Hospital
- HS2. Nepean Private Hospital
- HS3. Hospital Specialist Clinic
- HS4. Tresillian Unit
- HS5. Extensive Primary Care & GP Networks

Future Services

- Commercial medical facilities
- Medical related accommodation
- Future health services (private and public) *
- Multi-deck public car park
- Extension of Barber Avenue to Somerset Street

Features

Nepean Hospital is a 500+ bed tertiary referral hospital and provides a high level inpatient and outpatient services for people of all ages. This includes Emergency, Critical Care, Acute Medicine, planned and emergency Surgery, Maternity, Neonatal, Paediatric Medicine and minor surgery, Mental Health, Aged Care/ Rehabilitation Services, Drug and Alcohol Services, Oral Health and a broad range of specialist outpatient clinics and services. Currently, super-specialty services (such as burns & spinal injury) where numbers are small and the treatment is highly complex, tend to flow to Westmead Hospital and other centres.

The campus also includes the 121 bed Nepean Private Hospital which specialises in general surgery, maternity, orthopaedics and urology. The campus has two private specialist clinics.

The Future

The hospital campus is currently 15 hectares with a range of lands suitable for both large and small scale health developments. Key development sites include private and public lands suited for health uses such as; further acute and sub-acute services, surgery including theatres, outpatient facilities, medical specialist suites and research. Future expansion of the medical core of the campus will ensure the precinct can meet future demand.

"I am particularly keen to be involved in developing new forms of telehealth and telecare services that will be of benefit for our health system and the community, along with creating new roles for education and private sector investment"

Professor Branko Celler

Executive Dean of the College of Health and Science
University of Western Sydney

Objectives

- A World leading health campus featuring a complete range of advanced tertiary hospital services (incl. outpatient services) and related teaching and research facilities.
- Expansion of precinct as a primary referral centre for Central NSW and Western Sydney populations.
- Continue to build on the regions extensive Primary Care and GP Networks that support the growing regional population.
- Develop the precinct's research infrastructure and associated capabilities, particularly in Translational Medicine (bench to bedside) and Preventative Health and Primary Care research.
- Ensure the precinct is adequately planned to accommodate future health service facilities required to meet a population catchment predicted to double over the next 20 years.
- Develop a National Centre of E-Health, with a particular focus on tele care and tele health services, to reduce the dependency on hospital beds & to shorten waiting times.
- Lower the costs to Government of providing health care in the region.
- Improve the equity of public health spending in the region (See graph at right).
- Develop further critical mass in private medical specialist services provided within proximity to the Penrith Health Campus.
- Continue to expand outpatient services, including patient step down facilities.
- Nepean Hospital to strengthen its regional role as a Trauma Centre and as a Perinatal Centre.

Components

- Additional tertiary hospital services (see page 12).
- A National Centre of E-Health.
- A recognised hub for Translational Medicine, Primary Care and Preventative Health.
- Growing roles for private specialist health services, including outpatient services.
- A growing range of support services such as retail, meeting and eating facilities.
- New multi-deck public car parking facility.



NSW Department of Health Annual Report 2007/2008, p. 83, & NSW Health Services Comparison Data Vol. 1, 2007/2008, p. 9-18.

Implementation

- Establish the Penrith Medical Research project group to develop and implement a strategy to grow the research Infrastructure and capabilities of the precinct through partnership with organisations like Sydney University, UWS, Nepean Hospital, Nepean Division of GPs, Penrith Council, research foundations and the business community.
- Work with Industry & Investment NSW to develop and implement the above strategy over the next 5 years.
- Secure resources to develop and implement the above strategy from partners and Government.
- Following listing of the precinct as a Potential Specialised Centre, work with planning authorities to guide land use planning to expand the 'medical core' of the Penrith Health Campus for future health uses (see map page 12).
- E-Health working group established between UWS, Sydney University, Nepean Hospital, NDGP and community care teams to establish tele health and tele care opportunities in the region.
- Identify and support private sector investment in medical facilities within the Penrith Health Campus. Identify health and medical services that offer good opportunities for private sector take up.
- Work with the Nepean Blue Mountains Local Health Network to implement key themes of the vision, including resourcing of initiatives.





Education Facilities

A recognised destination for the education of future professionals in medicine, health, wellness and related industries



Asset Summary

- E1. TAFE NSW - Western Sydney Institute, Nepean College
- E2. UWS Kingswood
- E3. UWS Werrington (South & North)
- E4. The University of Sydney, Sydney Medical School Nepean
- E5. A range of Primary and Secondary schools

Features

The UWS Kingswood campus is the University's largest venue for students studying Education. The campus is also strong in Engineering. UWS Werrington is a main campus for course delivery in Communication and Economics & Finance degrees. More than 8,500 students currently study on the two campuses.

TAFE NSW - Western Sydney Institute, Nepean College, Kingswood is a leader in the delivery of nationally accredited qualifications in identified skills shortage areas such as: Children's Services, Refrigeration, Air-conditioning, Nursing, Management, Tool Making, Fabrication and Accounting. More than 7,000 students study each year at the Nepean College.

The precinct is also a teaching ground for future Doctors primarily through the University of Sydney's, Sydney Medical School Nepean.

Future

With an abundance of land reserves at Kingswood and Werrington, UWS has nominated its Werrington South and Kingswood campuses as being capable of meeting the University's land requirements for the next 20 years. UWS's future educational needs in Penrith will be focussed on these two campuses.

To meet the identified employment growth in Health and Wellbeing in the region, TAFE NSW - Western Sydney Institute is seeking to increase its current capacity at Nepean College and create specialised facilities for nursing which is an identified skill shortage area. This facility will also provide the opportunity for delivery in a range of new health training areas such as dental, optical dispensing, audiology and sterilisation, which are currently not offered at TAFE NSW - Western Sydney Institute, Nepean College.

“TAFE NSW plans to build a new Health training facility at Kingswood by 2015. When completed, it will double the number of health enrolments (incl. nursing) at Kingswood Campus and offer new training in dental assistance, optical dispensing and audiometry”

Susan Hartigan, Director, TAFE NSW - Western Sydney Institute

Objectives

- Develop the precinct as a Centre of Education Excellence in Health and Wellbeing (H&W), and increase the local skills base in H&W fields.
- Expand the role the precinct plays in training nurses, doctors, researchers and clinicians.
- Develop specialist areas of education in e-health/ telehealth and related fields such as industrial device engineering and bio medicine.
- Improve the health and wellbeing of the region through education programs about personal health and wellbeing management.
- Expand opportunities for flexible onsite training for firms in the health and wellbeing sector.

Components

- A new health training facility at TAFE NSW - Western Sydney Institute, Nepean College, Kingswood Campus
- A National Centre of Education Excellence in E-health that focuses on teaching, research and E-Health applications
- Western Sydney 'healthy workers initiative'
- Western Sydney 'healthy schools initiative'
- A new Chair In Active Living and Preventative Health
- A community health school-based training Initiative (a Penrith Schools Industry Partnership)

Implementation

- Seek funding from NSW and Australian Governments to construct the proposed health training facility at TAFE NSW - Western Sydney Institute, Nepean College, Kingswood Campus.
- Work with TAFE NSW - Western Sydney Institute to establish the Nepean College, Kingswood Campus as a State centre for health training.
- Work with the Penrith Schools Industry Partnership to encourage local students to choose education and career pathways in health sciences.
- Through various E-health/ tele health initiatives, expand the role for medical device design education to be expanded at UWS Penrith.
- Implement Western Sydney 'healthy school' and 'health work-place' programs in partnership with the Centre for Health Innovation and Partnership (CHIP).
- Identify funding opportunities for a Chair in Active Living and Preventative Health.
- Develop a strategy to improve the pathways for enrolled nurses to train in the health system.
- Support the development of new educational facilities and services that strengthen the role of the precinct as an education hub.



MEDICAL RESEARCH STUDENTS



FUTURE DOCTORS



HEALTH SERVICES TRAINING



NEW EDUCATION & CLINICAL SERVICES BUILDING 2012

The University of Sydney, Sydney Medical School Nepean

New Building in 2012 to provide...

- Better health care to the people of Western Sydney
- A home for the University of Sydney's medical, nursing and allied health students
- Level 1 - Outpatient clinics and clinical research
- Level 2 - State of the art educational facilities including clinical skills laboratory computer rooms and auditorium
- Level 3 - Medical School Administration and discipline research groupings

Funded by the Federal Government Health and Hospital Fund and the University of Sydney.



"The University of Sydney is committed to training future Doctors, Specialists and Researchers for this region through its Sydney Medical School Nepean"

Professor Bruce Robinson, Dean of Medicine, the University of Sydney



THE UNIVERSITY OF
SYDNEY

<http://sydney.edu.au/medicine/nepean/>

Sydney Medical School Nepean

Sydney Medical School Nepean is one of the six Clinical Schools of the University of Sydney. Each year the School educates over 200 local students and 100 full fee paying international students.

Nepean has a multi-disciplinary team of academics, clinicians, nurses and allied health staff all contributing to teaching and research.

While the University of Sydney Medical Program is the main context for student teaching, medical education continues into the early postgraduate years, and indeed further into the specialist training programs, conducted by the various Royal Colleges.

The School has close links with rural New South Wales helping teach rural medical students in a number of disciplines. Much of the education is carried out via videoconferencing.

The school provides teaching facilities to the NSW Ambulance Service for the Extended Care Paramedic Program. In 2011 we will be welcoming students from the Nursing Faculty of The University of Sydney back to Nepean.

Medical research is another major aspect of the School's activities. Many postgraduate research students undertake their training towards a higher degree in the facilities of the School, under the supervision of scientists and clinicians conducting research programs in a wide variety of fields.

Nepean has six well equipped laboratories and enthusiastic leaders in all its disciplines who combine laboratory based research with clinical research. Most of the research is focussed around translational or 'bench-to-bedside' research.

The School's main areas of research include:

- Critical Care
- Medicine, including Geriatrics, Neurology, Endocrinology, Haematology, Gastroenterology
- Obstetrics Gynaecology and Neonatology
- Paediatrics
- Psychiatry
- Surgery

Research output has increased dramatically over the last few years with 50-100 peer reviewed publications produced each year. International research collaborations have been formed with China, Canada, United Kingdom and Germany.

Sydney Medical School Nepean has grown significantly over the last ten years with the recent addition of a new student accommodation block and a new clinical school building planned for completion by the end of 2011.

Other Education

- 5+ child care centres and/ or pre schools
- 3 major libraries (Ward, Allen, Nepean Medical)
- Blue Mountains Grammar School
- Golden Stave Music Therapy Centre, including International training (UWS + Nordoff-Robbins Music Therapy Aust)
- Jamison High School - Health & Medical Admin Trade School
- Kingswood Primary School
- Montgrove College (Girls School)
- Penrith Academic Selective High School
- Penrith Anglican College
- Penrith Christian School
- St Dominic's College
- St Paul's Grammar School
- Wollemi College (Boys School)



Research and Innovation

Attracting investment and the best people to solve problems that contribute to community wellbeing.

“Our engagement with UWS in commercialising and bringing to market new innovations in health products has helped us develop a multi-million dollar global export arm of our business.”

Yves Coulon, General Manager, ASP Healthcare, Penrith NSW

Penrith Health and Medical Research Project

“As Dean of Medicine, I am whole heartedly committed to working towards establishing a medical research institute within the Health and Education Precinct.”
Bruce Robinson Dean of Medicine, the University of Sydney



Future Research and Innovation Facilities

- R1. Penrith Health and Medical Research Project
- I2. National Centre of Excellence in Community E-Health
- B3. Penrith Health and Innovation Hub
- H4. Tele- Health Technology Centre

As demonstrated on the previous page, a wide range of World recognised researchers and Innovators work within the precinct. Given the co location of major research orientated education and health facilities, combined with a growing base of highly skilled local workers, the precinct will continue to grow as an internationally recognised research hub.

Australian Centre of Excellence in E-Health

“I am excited about the opportunity to develop the precinct as a National Centre of Excellence for teaching, research and deployment of E- Health services.”
Professor Branko Celler Executive Dean of the College of Health and Science, University of Western Sydney



Aims

The future Penrith Medical Research Hub will grow the role the precinct plays in the translation to global health and medical research. This will be a community initiative to build Penrith's research and knowledge capacity. A key focus of this project will be expanding the precincts research role in Translational Medicine, Preventative Health and Primary Care.

The Australian Centre of Excellence in E-Health will identify ways E health services such as tele health and tele care can be deployed in a commercial and scalable basis. This facility will include teaching and research opportunities, along with the potential for new innovative models of ageing in place to be established by UWS.

The Penrith Health Innovation Hub would assist local medical researchers and Innovators to commercialise their Innovations. Commercialisation would aim to develop income and wealth for the region through growing the Innovation capacity of the Precinct. Initially, this project will look at working with existing commercialisation arms of UWS and Sydney University. It will also look at other organisations that specialise in commercialising of medical and health innovations.

A Tele-Health Technology Centre to be established at Nepean Hospital to look at ways to use technology to provide care to patients closer to home, including second opinion and decision support for clinicians working in distant facilities - such as in rural NSW.

The Precincts research and Innovation projects will benefit from ready access to region's large population base.

Penrith Health Innovation Hub

“The hubs role, though a formal product/ service development process, is to develop solutions that are commercial and marketable for mass production through joint ventures with private organisations”
Professor Mohamed Khadra Professor of Surgery, Sydney Medical School Nepean



“Establish a Penrith Health and Well Being Innovation Network of local firms and entrepreneurs to collaborate on growing opportunities in Health and Wellness”

NSW Government Response to Western Sydney Job Summit, 2010

Objectives

- Develop a robust and vibrant research community in Penrith that conducts high quality and globally recognised research in the selected areas of importance.
- Grow the precincts research strengths in areas of, but not limited to Translational Medicine, Preventative Health, Primary Care, E-Health and Issues related to population health.
- Continue developing the international medical research reputation of the precinct
- Establish the Penrith Health and Medical Research Hub, including appropriate facilities and infrastructure within 5 years.
- Encourage the commercialisation of health innovations developed by the precincts researchers
- Become a leader in the research and implementation of E-Health initiatives for local, regional and national populations
- Establish innovative technology based models in aged care.

Components

- A Translational Medicine Research services centre, including the potential to develop into a future research institute.
- A Preventative Health and Primary Care research and innovative services centre, including potential to develop research institute status.
- National Centre of Excellence in E-Health, particularly focussed on Tele-health and Tele-care, including a potential facility at UWS Kingswood with integrated 'ageing in place' facilities.
- The Penrith Health Innovation Hub
- A teaching and research Chair appointed in Active Living and Preventative Health
- A Tele-health Technology Centre to create new opportunities in Telemedicine.
- UWS Co-operative Research Centre (CRC) in telehealth & telecare.

Implementation

- Develop and present the case for research infrastructure to be increased in Western Sydney.
- Develop a community fund to raise monies from private, community, education and government sources to support the establishment of research facilities in the Precinct.
- PBA in partnership with relevant Government business agencies to set up and run the Penrith Health and Innovation Network to assist Western Sydney SMEs, researchers and other partners to exploit and commercialise health innovation.
- Seek Government funds to complete a business feasibility study to establish a Penrith Health Innovation Hub.
- Support funding for the CRC in telehealth & telecare.
- Work with UWS towards establishing an E-Health Centre of Excellence on its Kingswood Campus - including integrated 'ageing in place' opportunities.
- Develop a prospectus of Precinct's research capabilities to present to medical research funding programs.
- The following working groups will also be established to implement projects listed in this section, these include
 - Penrith Medical Research Projects working group
 - E-Health working group

For more details please refer back to page 13.

“A National Centre of E-Health will connect to the roll out of Personally Controlled E-Health Records. Taskforce members have applied for an Australian Government grant for Phase 2 of the roll out to be established in Western Sydney.”

Centre for Health Innovation & Partnership (CHIP)

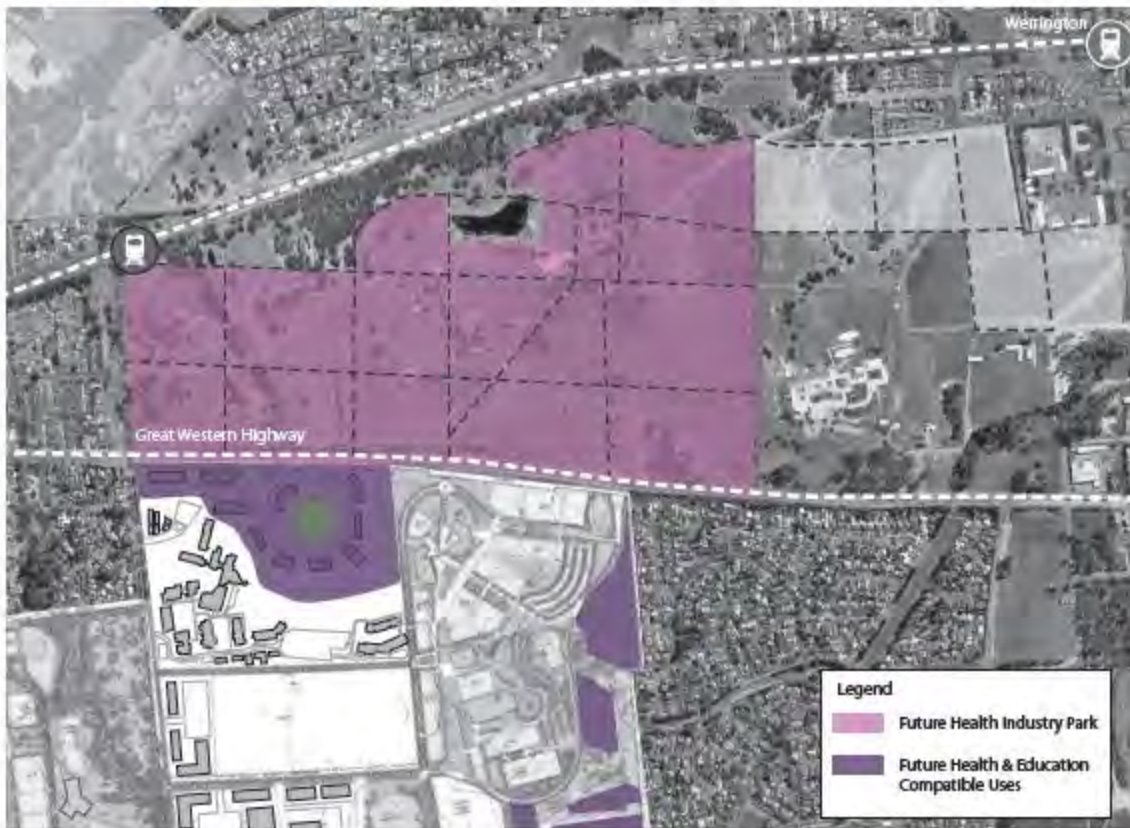


VIRTUAL CARE FROM NEPEAN HOSPITAL



Health Industry

Providing a full range of future options for health enterprises of all sizes to call the precinct home



Asset Summary

- HI1 Private medical consulting practice (mixed use)
- HI2 Major medical consulting space (major commercial)
- HI3 Medical and clinical space (surgical, day surgery)
- HI4 Health Industry Park (business park, campus style)

Features

There were around 4,800 jobs located in Kingswood in 2006. Approximately 3,000 of these jobs were located around the Nepean Health campus, including employment in medical specialist rooms in close proximity to the Hospital. The precinct has two major medical specialist clinics offering opportunities for consulting specialists to establish businesses, along with an identified latent demand for additional medical suites. The precinct has also seen the gradual redevelopment of numerous detached houses for consulting specialist uses, including wide use by allied health businesses.

Future

By 2026 it is forecast there will be a minimum of around 8,200 jobs in Kingswood, and over 4,000 – 5,000 jobs at Werrington. Combined this represents a forecasted total of more than 12,000 – 13,000 jobs in the Penrith HEP by 2031.

The full range of opportunities for the health industry will be in part realised through the establishment of the Health Industry Park at Werrington. The Health Industry Park will be designed and developed to will the needs of larger scale health institutions including pharmaceutical, bio tech and other research-based health organisations.

Private development of commercial space for use by individual health practitioners will add depth to the existing market in the precinct. Development of the precinct's research and innovation potential through University partnerships will be a major attractor for future industry to the precinct. Additionally, business opportunities in the field of E-health will be created through projects based within the precinct.

"It is estimated that by 2031, an additional 13,000 new health and community service jobs (including wellness jobs) will be created across the Penrith LGA"

Penrith Business Alliance, 2010

Objectives

- To provide high quality employment opportunities for the regions growing population.
- Reduce the need for 63% of Penrith's resident workers to leave the City each day for work and the related traffic congestion.
- Create an environment that will attract future industries related to health, wellness and education.
- Be able to promote the precinct to the full range of future health enterprises ranging from small consulting health firms to large global health companies.
- Attract leading innovative firms to Penrith.
- Help attract knowledge health workers to Penrith such as researchers, scientists and medical specialists.
- Create an environment where investors can take advantage of growing opportunities in Health and Wellbeing.
- Promote the potential for synergies to be created between future industry and local Universities and health institutions.
- Create business park landuses that complement other business locations in Penrith, including North Penrith and the Panthers Penrith Development.

Components

- A large scale Health Industry Park at Werrington, particularly for Life Science companies.
- Continued development of the Penrith Health Campuses "medical core" for health and research organisations.
- Redevelopment of lands around the "medical core" for use by health organisations, and uses related to the two Hospitals and Universities.
- A Western Sydney, Penrith based Health & Wellbeing Innovation Network.
- An investment attraction campaign to attract leading health and Life Science companies to the Penrith.

Implementation

- Seek NSW State Significant Status for the Precinct.
- Work with planning and infrastructure authorities to develop lands at Werrington as a future Health Industry Park.
- Industry & Investment NSW to lead coordination of an investment attraction program to secure tenants from the Life Sciences industry to the Health Industry Park, and elsewhere in the Precinct.
- Work with the Nepean Blue Mountains LHN/ NSW Health to identify lands on the Penrith Health campus for future health related uses, including medical research uses.
- Work with the Nepean Blue Mountains LHN/ NSW Health to identify appropriate opportunities for private sector investment on the Penrith Health Campus (see example on p7 - PA.C.E).
- Work with Penrith Council to promote and encourage land uses around the Penrith Health Campus (including Derby St) by health institutions/ organisations, or uses that directly relate to the Hospitals or Universities.
- PBA to develop a Western Sydney, Penrith based Health & Wellbeing Innovation Network to assist small businesses take up commercial opportunities in health and wellness.

Case Study: Working with industry

The PBA, Nepean Division of General Practice and the Centre for Health Innovation and Partnership (CHIP) have worked with St Mary's based manufacturer, ASP Plastics & ASP HealthCare to develop a workplace-based program to improve the health and wellbeing of the company's employees. A demonstration pilot was conducted in November 2010 that has already succeeded in voluntarily engaging employees in reducing their weight. The PBA and the Nepean Division of GP have proposed to NSW Health (see p. 28) that COAG Healthy Workers Initiative funding be allocated to run the same program in other workplaces in Penrith and elsewhere in Western Sydney. If funded, this would be a start-up project for the Penrith Health and Education Precinct.



PROPOSED COMMERCIAL MEDICAL (BARBER AVENUE)



PRIVATE/PUBLIC RESEARCH FACILITIES



SPECIALIST MEDICAL CONSULTING



PROPOSED BUSINESS PARK AT WERRINGTON



Caddens Release Area & South Werrington Urban Village (1661 proposed dwellings)

Accommodation and Living

A complete range of living and accommodation options to meet the needs of the Precinct's residents, workers, students and visitors



New town centres

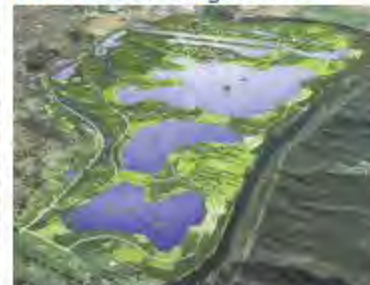
New Land Releases



Aged Living



International Living Address



Artists Impression of Penrith Lakes

Accommodation and Living

More than 8,000 people currently live in the precinct, including some lands north of the Railway line at Kingswood. This number is expected to grow at a significant rate over the next decade with several large residential releases set to develop, combined with the emerging health and education precinct that will encourage higher density infill residential development.

Reflecting its large student and publicly housed population, the precinct has characteristically high rates of semi-detached and terrace housing forms, along with high levels of rental housing tenure. For example 45% of all residents rent, compared to less than 30% of Sydney residents.

Existing Accommodation

- UWS Penrith Student Residential College
- The University of Sydney, Student residences
- Tresillian, family short stay accommodation
- Rotary Cottage, carer accommodation
- Anglican Retirement Village (under construction)

Future Accommodation

- A1. Student accommodation
- A2. Professional accommodation
- A3. Medical accommodation
- A4. Hotel Accommodation
- L5. Aged living
- L6. New residential
- L7. Doctors Accommodation
- A*. UWS conference and hotel facility

Future Housing

- "Doctors accommodation"
- Caddens Release area (1,200 dwellings)
- South Werrington Urban Village (mixed use living)
- Various small to medium scale residential development opportunities

“I have been investing in Penrith’s property market for 20 years and see the Penrith Health and Education Precinct as offering a unique opportunity for other investors to be successful in Penrith”

Jim Aitken OAM, Managing Director, Jim Aitken & Partners

Objectives

- To expand the range and depth of housing options in the Precinct to meet the needs of its residents, workers and visitors.
- Encourage private sector investment to further develop the Precinct’s residential offering.
- Meet the housing needs of the Precinct’s future health and education professionals.
- Cater for the housing needs of the Precinct’s future student population.
- Develop housing types that will assist in attracting Doctors and Specialist to Penrith.
- Identify opportunities for aged living in the precinct, with a focus on promoting ‘aged learning’ and connections to UWS.
- Attract highly skilled professionals to work in Penrith by promoting high quality and appropriate living opportunities with proximity to Penrith.

Components

- Caddens residential release area (1247 dwellings).
- South Werrington Urban Village (414 dwellings)
- Anglican Retirement Village under construction (77 assisted living /retirement units).
- UWS conference and hotel facility. (150 rooms)
- New forms of residential types attractive to Doctors.
- Numerous residential and mixed use re development opportunities.

Implementation

- Assist developers to produce housing product that will meet the needs of the Precincts future residents.
- Prepare, maintain and promote an investment prospectus of development opportunities in the precinct.
- Promote high quality living opportunities that exist within 30 mins drive of the precinct, including the Blue Mountains and the Hawkesbury.
- Promote existing rural lands between Caddens Road and the M4 Motorway as small rural holdings that could attract Doctors and other highly skilled professionals to new ‘rural living’ in Penrith City.
- PBA to advocate for the future development of Penrith Lakes as an international living address.
- PBA to advocate in support of the future development of Penrith Lakes.



See www.penrithvalley.com.au for attractions and activities in Penrith Valley

“New land releases such as Caddens Release Area and South Werrington Urban Village will increase the future supply of housing in the Precinct”



DOCTORS ACCOMMODATION - NEARBY BLUE MOUNTAINS



UNIVERSITY OF SYDNEY, STUDENT ACCOMMODATION



UWS STUDENT ACCOMMODATION



PROFESSIONAL ACCOMMODATION

The Region

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Next Steps

Page 023

Public Transport and Infrastructure

- Making the Precinct an attractive and easy place to work, live and visit
- Making the Precinct an easy place for future workers & visitors to access each day



North West and South West Growth Centres



Cox Richardson Architects & Planners
Map shows proximity of the NW + SW Growth Centre to the Penrith HEP

Possible Shuttle Bus Route



Shuttle Bus Connections

Penrith Regional City and the Penrith Health and Education Potential Specialised Centre will need to be closely integrated. The distance between Penrith CBD and Werrington is approximately 6kms – similar to the distance between Westmead and Specialised Centre, Parramatta Regional City and the Rydalmere campus of UWS.

These distances require rapid, affordable and easy access transport services to tie together the key site which support a Regional City. A shuttle bus service is a potential transport mode to link the various elements of the Penrith Health and Education Potential Specialised Centre, and Penrith CBD.

The best benchmark is the Perth Central Corridor, also around 6km between the University of WA at Crawley, in the west, the Charles Gairdner Hospital, the CBD and East Perth. The system comprises of 3 networks of a free shuttle bus service, with a 5 minute headway. Perth CAT (Central Area Transport) can be the model for the Penrith Economic Corridor linking the Penrith CBD in the west via the CBD, the High School, Nepean Hospital, the TAFE, UWS Kingswood and Werrington.

Parallel with these routes, an express bus route along the Great Western Highway could link the Penrith CBD, the Hospital, Werrington and St Marys.

Future Infrastructure Plans

Growth of the precinct will depend on appropriate infrastructure being delivered to service the needs of workers, residents and visitors. This section identifies the infrastructure that will be pursued in support of developing a world leading Health and Education Precinct. Improving the public domain appeal of the Precinct will be enhanced by the development and implementation of a Precinct Public Domain Improvement Plan.

Future Transport Infrastructure

- IN 1. Public car parking tower (Penrith Health Campus)
- IN 2. Potential Arterial Road for Investigation
- IN 3. Potential New Train Station between Kingswood & Werrington
- IN 4. Precinct Shuttle Bus
- IN 5. New Western Express Rail Service

Future Public Infrastructure

- IN 5. Expanded Broad Band
- IN 6. Improved pedestrian routes and bus stop facilities
- IN 7. Future cycle ways and walking routes to encourage active living

Public Domain Plan

- PD 8. Precinct Public Domain Improvement Plan

The New Western Express Rail Service is a \$4.5 billion commitment by NSW Government to build a new 'City Relief Line' from Eveleigh to Wynard allowing additional Express Train services to run from Penrith to the City...reducing average travel times for this trip by 10mins.

Source: Metropolitan Transport Plan 2010 (various)

Objectives

- To make the Penrith HEP one of the most accessible employment destinations in Sydney.
- Identify the infrastructure requirements of the precinct, and the important role new infrastructure will play in supporting the Precincts growth.
- Raise the awareness of required infrastructure among Government agencies.
- Enhance the attractiveness of the Precinct as a place to live, work and invest.
- Encourage outdoor activity and active living in the Precinct.
- Improve the movement of people around the Precinct, and access from outside the Precinct.

Components

Transport Infrastructure

- Public car parking tower within the Penrith Health Campus (680 car parking spaces currently proposed).
- Potential Arterial Road for investigation to link the precinct with the north & south west Sydney growth centres.
- Potential Train Station between Werrington and Kingswood to service the future Health Industry Park.
- New Western Express Rail Service to reduce travel time to City by approx 10 mins from Penrith (construction starts end of 2012, NSW Transport).
- Precinct Shuttle Bus to link all components of the Precinct with effective local public transport.

Public Infrastructure

- Expanded Broad Band infrastructure to connect large institutional users such as Hospitals, Universities, research organisations to the community, and to enable future E-Health Initiatives in the precinct.
- Improved pedestrian routes and bus stop facilities.
- Investigation of future cycle ways and walking routes to encourage active living.

Public Domain

- A Public Domain Improvement Plan for the Precinct will guide the delivery of a range of relevant improvements within the precinct.

Implementation

- Through the creation of a precinct development committee (see page 27) make efforts to address the transport and infrastructure requirements of the precinct.
- In partnership with Penrith Council and the NSW Government look at innovative ways to fund required infrastructure in the Precinct.
- Assess the potential of the Precinct to gain State Significant Status to align the precinct with the NSW State Plan.
- Work with the NSW Department of Transport and Penrith City Council to assist in the planning and delivery of transport improvements for the Precinct.
- Partner with NBN Co to identify opportunities for Broadband roll out in the precinct, particularly in support of the precinct's E-Health initiatives.
- Partner with Penrith City Council to implement a Precinct specific Public Domain Improvement Plan, including potential to fund improvements through developer contributions.
- Link the precinct with Penrith CBD through the Penrith Regional City Access Plan.



Precinct Support Services & Coordination

- Enhancing the role of the Precinct as an attractive place to work, live and invest
- Providing coordination, leadership and resources to implement the Strategic Vision

UWS Kingswood Conference & Hotel facility (proposed and indicative only)



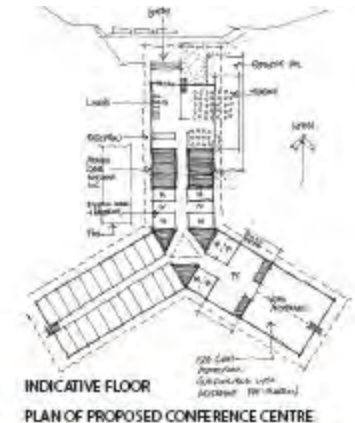
SPORTING FACILITIES



EXERCISE FACILITIES



MEETING PLACES



Support Services & Coordination

The future development of the precinct will see increased demand for services to support the needs of new residents, workers, students and visitors. Some of the existing services include:

Leisure & recreation

- Chapman Gardens at Kingswood
- Kingswood Hotel
- Kingswood Sports Club
- Several smaller parks and reserves
- UWS Connect Bar and Café
- UWS sporting facilities (hockey, gymnasium, ball courts, sports fields)

Other interesting facilities

- Computer research centre (UWS)
- Entree Restaurant (a TAFE training restaurant)
- Frogmore House - UWS Chancellors Office
- Nepean Arts and Design Centre, incl. 'Deefa' studio (TAFE)
- NSW State Archives - Reading Centre
- Television Sydney (TVS) Limited
- The Golden Stave Music Therapy Centre
- UWS design studio (broad cast quality animation, television & post production studios)
- UWS Observatory & Play House Theatre
- UWS Hockey Centre

Future services and facilities

- UWS Conference and Hotel facility (proposed)
- Growth in dining, meeting and event venues (required)
- Revitalisation of Kingswood Commercial Centre (planned)
- Ancillary retail services within the health campus (required)

“The Penrith Business Alliance will support the continuation of the Taskforce’s efforts to lead and implement the Strategic Vision for the Penrith Health and Education Precinct.”

Paul Brennan, PBA Chairman

Objectives

- To develop and promote a vibrant range of support services and facilities in the Precinct for its workers, residents, students and visitors.
- Ensure effective implementation of the Vision.
- Improve the cultural appeal of the Precinct, and promote existing cultural strengths.
- Develop a health education “village feel” through providing more cultural and other services to workers, residents and students.

Components

- A Precinct development committee.
- A Memorandum of Understanding (MOU) between all stakeholders.
- A new conference and hotel facility within the Precinct.
- Additional retail, meeting and event venues within the Precinct.
- New cultural facilities and services within the Precinct.
- Public domain improvements.

Implementation

- Seek formal support and recognition from Penrith City Council and NSW Government for a Precinct development committee to advise Government on the needs of the precinct.
- Precinct development committee to appoint a project manager as necessary.
- The Precinct development committee to focus on implementing the Vision through, advising government, securing resources, managing research and Innovation projects (see page 18-19) and marketing the precinct.
- Develop an MOU between all stakeholders as a formal commitment to partner on the delivery of relevant projects outlined in the Vision.
- Develop a guide of all support services and interesting facilities, along with other relevant marketing material for the precinct.
- Secure an appropriate site, agreement and funding to establish a Precinct Conference and Hotel Facility (UWS Kingswood site shown as indicative only)
- Identify public domain and cultural service improvements required in the precinct, and develop strategies to enhance.



CADDENS RELEASE AREA FUTURE TOWN CENTRE



LOCAL LIFESTYLE - PENRITH VALLEY



UWS RESEARCH FACILITIES



ENTREE RESTAURANT (WSI TAFE, NEPEAN COLLEGE)



LOCAL DINING & CULTURE

The Region

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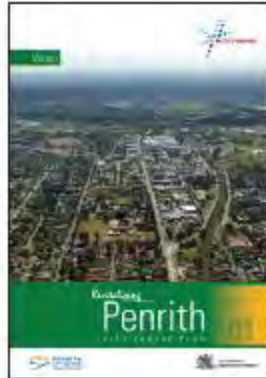
07

Next Steps

Additional Information



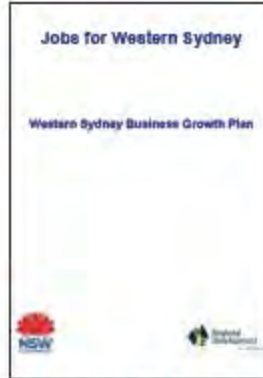
Well Precinct Strategy
<http://www.penrithcity.nsw.gov.au/>



Regional City/ LEP
<http://www.penrithcity.nsw.gov.au/>



NSW Government
 Response to the Western
 Sydney Jobs Summit
<http://www.nsw.gov.au/>



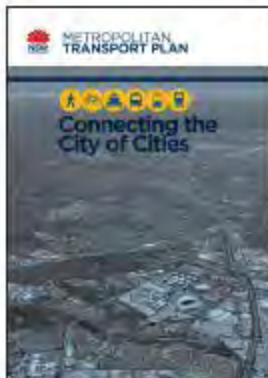
Jobs for Western Sydney
http://www.business.nsw.gov.au/region/reg_bus_growth_plans.htm



Western Sydney Healthy
 Workers Initiative
<http://penrithbusinessalliance.com.au/regional-city/major-projects/>



Penrith Regional City
 Health Strategy
<http://www.penrithcity.nsw.gov.au/>



Metropolitan Transport
 Plan http://www.nsw.gov.au/sites/default/files/uploads/common/1_MTP_Intro.pdf



Towards a Penrith
 Health and Wellbeing
 Economic Strategy
<http://penrithbusinessalliance.com.au/>



Penrith Urban Strategy
<http://www.penrithcity.nsw.gov.au/>



Metropolitan Plan for
 Sydney 2036
www.metroplansydney.nsw.gov.au/



Metropolitan Plan for Sydney 2036
www.metroplansydney.nsw.gov.au/

Implementation Strategy

Overview

The Strategic Vision for the Penrith Health and Education Precinct (Penrith HEP) has been developed by an expert Task Force of representatives from business, research, health, education, planning and industry organisations engaged in the Penrith region. The Task Force was chaired by Paul Brennan, Chairman of the Penrith Business Alliance, with assistance from the NSW Department of Premier & Cabinet.

The preparation of the Strategic Vision for the Penrith HEP commenced following a request from the NSW Premier announced in May 2010 at the NSW Government's Response to the Western Sydney Jobs Summit. This Vision also addresses other actions identified at the Summit concerning industry attraction strategies and innovation in health and wellbeing sectors relevant to the future of the Precinct (see page 3).

The Strategic Vision was largely steered by the 'Towards a Penrith Health and Wellbeing Economic Strategy' commissioned by the Penrith Business Alliance in February 2010.

While the concept of a Precinct based approach is not a new idea, the work conducted in preparation of this Strategic Vision is the first time all stakeholders have come together in partnership to plan for the future. However, as identified by the PBA, the Vision is the first time that Penrith's education and health assets have been bundled together in this way in order to market new opportunities in education, employment and investment for the region.

An overall Structure Plan of the Precinct is depicted on page 6 of the Report and acts as a guide to the scope of the Vision for the Precinct, and how the component parts will, together, create a world leading destination for health, education, medical research and related industry over the next 10-15 years.

A partnership approach

As already demonstrated through preparation of this vision the Penrith Health and Education Precinct will be delivered through partnerships between key stakeholders, the community and government.

Securing the commitment

The commitment this partnership approach is to be formalised through a Memorandum of Understanding between Precinct stakeholders, related community organisations and relevant government partners.

Precinct development committee

A Penrith Health and Education Precinct Development Committee will inform and lead the implementation of key projects and priorities listed in the Vision. This Committee will include both a key Precinct Leadership Group which will lead and drive key projects and initiatives (including securing resources), and Working Groups that will come together as needed to inform the Leadership Group on appropriate issues and strategic options.

Summary of key project areas to deliver the Vision

For details see relevant pages as listed

1. Translational medicine and preventative health research project (p 13, 19)
2. National Centre of Excellence in E-Health (p 18, 19)
3. A CRC in telehealth & telecare
4. Funding a Chair in Active Living in Preventative Health (p 15)
5. New health and education facilities (p 6, 13, 15)
6. Strategic land use planning (p 21, 25)
7. Precinct infrastructure, including transport (p 25)
8. Public domain improvements (p 27)

9. Marketing & investment attraction (p 23, 27)
10. Business opportunities in health and wellbeing (p 19, 21)
11. Work force development, education and training (15)
12. Precinct support services (p 27)
13. Implement the 'Towards a Penrith Health and Wellbeing Economic Strategy' (p 3, 28).

Potential government support

- Recognition by State and Australian Governments of the Penrith Health and Education Precinct as an emerging medical research and innovative services centre, including support where necessary.
- Ongoing partnerships and joint ventures between the Government and PBA to deliver projects.
- Consider funding of the TAFE NSW – Nepean College, Kingswood campus health services training centre.
- Ministerial consideration of the Precinct in the medium term as a NSW State Significant Site, including preparation of detailed land use and infrastructure plans for the Precinct.
- Forward planning and investment attraction of Life Science and Health related enterprises to the 120ha future Health Industry business park at Werrington.
- Consideration of further investigation of the potential new station between Werrington and Kingswood and the arterial road to support the future health industry park.
- Consider support for new multi-deck public car parking and upgraded road infrastructure within the Penrith Health Campus.
- Nomination of Local, State and Australian Government representatives to work with the Development Committee on key projects.
- Government funding of a business plan to

establish the Penrith Health Innovation Hub to better commercialise health innovations.

- Funding of a CRC in telehealth and telecare
- Funding of the 'Healthy Workers Initiative' project as submitted to NSW Health by the Centre for Health Innovation and Partnership (CHIP) and the PBA.
- Public infrastructure investment in health, education and transport to consolidate the growth of the precinct as a major research, education and health centre.

Potential private sector opportunities

- Joint venture with the PBA and its partners on the development of a National Centre of Excellence in E-Health, including technology based projects in tele-health, tele-care and other E-health partnership initiatives.
- Partner with the Precinct Development Committee to establish the proposed conference and hotel facilities.
- Opportunities to deliver key infrastructure (such as car parks) and other private sector development opportunities, including housing.
- Involvement in future planning and development of the Health Industry business park at Werrington.
- Small to medium enterprise (SME) involvement in the Penrith Health and Wellbeing Innovation Network.
- Increase opportunities for white collar firms providing services to the health and wellbeing sector in the Penrith centre and expand links with capital raising firms to encourage increased investment in wellbeing products and services

Potential community involvement

- Community funding for medical research that translates into better local health outcomes, including the establishment of new research facilities.
- Support funding for a Chair in Active Living & Preventative Health with a local University.

Implementation Next Steps

01 Submit the Strategic Vision for the Penrith Health and Education Precinct to the NSW Government in accordance with the Premier's request, and seek agreement from Government and Agencies for support of the Vision and assistance with implementation of identified projects and priorities.

02 Prepare and finalise, in consultation, a formal Memorandum of Understanding between Precinct partner organisations, including government and Agencies, to support delivery of the Vision (page 27).

03 Work with Penrith City Council and the NSW Government to establish the Penrith Health and Education Precinct Development Committee and the appointment of a project manager as necessary to this Committee (page 27).

04 Taskforce members to be involved in a Working Group to grow the research capabilities and infrastructure of the Precinct (page 13 and 19).

05 Establish a National Centre of Excellence in E-Health (Project 1)
Explore the opportunity to establish new technology based tele-health and tele-care services within Nepean Hospital in partnership with UWS, the University of Sydney, the Nepean Division of General Practice, NSW Health and other relevant community and health organisations. (page 18).

06 Establish a National Centre of Excellence in E-Health (Project 2)
Work with the University of Western Sydney to

develop tele-health and tele-care related research, teaching and services at their Kingswood campus, including funding of a CRC in telehealth & telecare (page 18)

07 Work with Penrith City Council and NSW Department of Planning to align local and state planning instruments with themes and development initiatives identified in the Vision (page 13 and 21).

08 Facilitate the planning and future development of UWS Werrington North Campus as a future Health Industry business park in partnership with UWS, TAFE, Penrith City Council and the NSW Government (page 21).

09 Work with Industry and Investment NSW on investment attraction of major Life Science companies to the Health Industry Park and the Precinct (page 21).

10 Establish the Penrith Health & Wellbeing Innovation Network to grow the base of local health and wellbeing related firms (page 19).

11 Investigate and facilitate with Agencies including Nepean Blue Mountains LHN & NSW Health, the development of new multi deck public car parking and upgraded road infrastructure within the Penrith Health Campus (page 12-13).

12 Research the range of additional medical, health and allied health services that could be provided by the private sector within the Precinct. Present and seek responses to these opportunities from the private

sector (page 13).

13 Strengthen and create student career pathways into health and wellbeing industries, through partnerships with NSW DET, and the Penrith Blue Mountains Schools Industry Partnership (page 15).

14 Secure funding for, and with relevant partners, roll out the Western Sydney Healthy Workers and Healthy School Initiatives (page 21).

15 Prepare a Precinct public domain improvement plan, including identification of funding sources of all improvements, including future local transport services (page 25).

16 Develop branding and marketing material to promote the Precinct as a place to work, live, study, research and invest. This will include an assessment of local support services such as retail, dining, recreation & cultural services (page 23).

17 Develop a housing and accommodation plan to meet the needs of future workers, students and residents of the Precinct - as part of forward planning for the Precinct as a State Significant Site (page 23).

18 Work with NBN Co to improve the ready access to Broadband infrastructure to all households, students, institutions and researchers in the Precinct (page 25).

19 Ensure all transport and planning Agencies are involved in supporting the future development of the

Precinct (page 25).

20 Review planning and implementation of the Strategic Vision at 1, 3 and 5 year intervals and, through the Precinct Development Committee, prepare reports for Government on progress achieved.



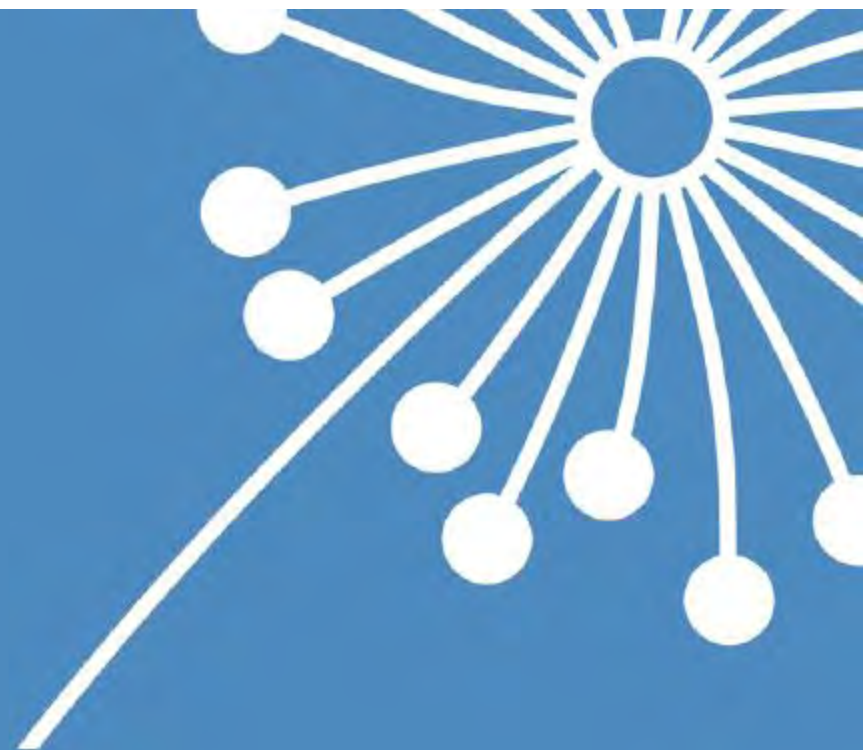
Please forward all comments on the Strategic Vision to:

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